

Epilogue on a Sind Lake

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Manchar Lake in the north-western region of former Sind Province has long been famous amongst sportsmen as the winter haunt of vast flocks of waterfowl. In the New Year of 1928 it was visited by Dr. Sálím Ali, and his vivid account of the birdlife and of the fascinating methods used by the local fishermen or Mohannas to hunt and capture fish and fowl from the lake waters, remains on record in Volume 32(3) of this *Journal*. I hope therefore that it will be of interest to record the impressions of a visit to the lake some thirty-eight years later.

In 1928 the main irrigation scheme in Sind, emanating from a huge barrage across the Indus River at Sukkur, was not yet completed and it was feared that the whole lake, which depends on a natural seepage channel from the Indus River downstream of Sukkur, would ultimately be drained in order to augment the fertile acres which were already cultivated around the margins of Manchar as the summer floods receded. Though, there has been no deliberate drainage scheme, these fears have proved only partly unfounded as several major irrigation schemes on the Indus and its tributaries upstream of Manchar have served to decrease the flow of water which annually feed this lake which is now much reduced in area, and overgrown with reeds.

Even today, Manchar is still relatively remote and difficult of access to the outside visitor and though I had often wished to see the lake, which is reputed to be the biggest fresh water body on the sub-continent, it was not until December 1965 that an opportunity arose, when I was invited to join a small shooting party. Having occasionally heard first hand reports of persons who had visited Manchar, and being a witness to the alarming decline of many migrant bird species during the past fifteen years that I have lived out here, I was fully prepared for disappointments. Nevertheless I was shocked to find such small numbers of certain water fowl species as the following account will reveal.

Approaching Manchar via the railway line that runs along the west bank of the Indus, our party detrained at the historic old town of Sehwan, famous as the burial place of a Holy Saint¹ and a place of pilgrimage. From here we travelled about eight miles by Landrover over

¹ Qallandar Lal Shah Baz—Mayne, P.; Saints of Sind—J. Murray.

an incredibly bad and dusty track to the village of Bubak which squats on a slight hill overlooking the earthen embankment which was built some six years ago to contain summer inundations from Manchar's eastern banks. Arriving at Bubak around 3.30 p.m. we were greeted by the twitter of Common Sandgrouse flying overhead and the staccato call of Grey Partridges from the tamarisk scrub nearby. My companions being keen sportsmen, immediately set off to walk up the partridges whilst I attempted in the Landrover to reach the lake shore. After penetrating for about three miles inside the area of the embankment, I could still see only a distant fringe of reeds and no water. All the surrounding land was being cultivated with wheat which was irrigated by lift irrigation from a canal flowing from the lake. Judging from the few surrounding trees it did not look as though the area had been subject to more than the briefest flooding, if at all, in recent years. Apart from numerous flocks of Starling (*Sturnus vulgaris*) probably mixed flocks of the races *nobilior* (observed by Dr. Sálím Ali) and *poltaratskyi*, I saw no Black-tailed Godwit which I was expecting, but instead three or four large flocks of Dusky or Spotted Redshank (*Tringa erythropus*), feeding in the young wheat or turning and wheeling in tight flocks in the evening sun. In the Punjab I have observed the Dusky Redshank in small numbers only and mainly as an October and April passage migrant at which times many individuals are in the dark plumage of the summer season. I was later to observe that this wader was the dominant species around the fringes of Manchar and that it is also extremely plentiful in other wheels in northern Sind. Returning to the rest house, I walked along a small drainage channel fringed with tamarisk bushes and here and there by clumps of sedges and reeds. Besides the usual Whitecheeked Bulbul, Striated Babbler (*Turdoides earlei*), Common Snipe (*Capella gallinago*) and Moorhen (*Gallinula chloropus*), I was pleased to get very good views of Painted Snipe (*Rostratula benghalensis*) and Whitebreasted Waterhen (*Amaurornis phoenicurus*). Both are species of very local distribution even in northern Sind and are very seldom encountered at all in the Punjab. The Whitebreasted Waterhens were noisy and quarrelsome, whilst a male Painted Snipe fascinated me by bobbing its tail up and down like a Common Sandpiper (*Tringa hypoleucos*), a habit which I have not seen described in books. On my approaching very close it sank into the half submerged grass until its bill and entire wings were under water and only its striped crown and dark beady eye remained visible.

Our plan was to set off from the rest house at 3.00 a.m. the next morning; to travel by house boat down a canal which leads to the lake, and near its shores to embark on separate small punts from which the various guns in a spread out line would be able to shoot at whatever ducks were moving around at sunrise. Since my idiosyncrasies were well understood by the shooters, it was agreed that I should take my punt in an

opposite direction to explore with my binoculars as much of the lake as possible. As companions I had two Mohannas who took turns to pole the little vessel across the water. It was bitterly cold and still quite dark when we transferred to these smaller boats and as we passed between flimsy walls of reeds, I crouched in the bottom of the boat trying to keep my knees and wrists warm, listening to the weird cries of the jacanas and stuttering squawks of the Purple Moorhens (*Porphyrio porphyrio*) which rose noisily at our approach, their huge trailing feet clearly visible even in the darkness. After travelling between these reeds for nearly a mile and at the first glow of dawn, I separated from the others and we entered upon the open water. Even before the red rim of the sun broke the greying skyline, I was aware of bird life all around. Dozens of hovering Pied Kingfishers (*Ceryle rudis*) flew round the boat and as the sun rose, about twenty Common Swallows (*Hirundo rustica*), skimmed the disturbed lake surface of our now molten wake as though drawn along by our boat. Collared Sand Martins (*Riparia riparia*) were hawking higher in the sky, and as the sun gilded the reeds, the skies were criss-crossed by small flights of Common Teal, skeins of Little Cormorants (*Phalacrocorax niger*) and the occasional solitary heron.

The boatman told me that Manchar is 24 miles long and 12 miles wide. During the course of that day, we crossed the lake from shore to shore and traversed for several miles along the western shore. Allowing for the shimmering distortion of distant objects and visibility in such surroundings, I do not think the lake today is more than six miles broad by eight to ten miles long. On its western banks it is flanked by the low ochreous foot hills of the Kirthar Range and on the eastern bank, by which we had entered, there is at least a three-quarter mile wide fringe of reeds. The lake is nowhere deeper than 5 to 6 feet now and is clogged with a dense growth of water weed (possibly *Limnophila heterophylla*), and in isolated patches the rope-like strands of what looked like *Urticularia stellaris*. Here and there solid clumps of tall rushes stand out like islands, and in many stretches the surface of the weed-clogged waters are also carpeted with an orange brown algal growth which, together with the underlying weed, affords sufficient support for Little Stints (*Calidris minutus*) and numerous Yellow Wagtails (*Motacilla flava*) to run about the surface and even in certain places to support Pheasant-tailed Jacanas (*Hydrophasianus chirurgus*) and Paddy Birds (*Ardeola grayii*). Apart from the many boats which we encountered moving in different directions, we passed four floating villages or collections of house boats complete with cooking fires and tethered chicken. It appears that population pressure has increased even the number of Mohannas who make a living on the lake. I was told that about twenty maunds of fresh fish are daily despatched by bullock cart to the railhead at Sehwan and that in some seasons many times this quantity, and that this is the

main source of livelihood, as hardly a couple of dozen coots and ducks are captured daily. The fish which, I saw caught, seemed to comprise of three species only. Two were carp (probably *Rohu* and *Mirgal*¹), and the third with smaller scales a species of catfish (*Mori*). The old traditional methods of stalking the coots underwater, of shooting the coots with bows and arrows, and netting the duck in small purse nets (known as *Dhubi*) have been abandoned as there are no longer sufficient number of water fowl to make these techniques worthwhile. All my queries over two days and from various fishermen indicated that most of the duck were secured either by shooting or driving them at night into a net, which I saw suspended between poles and stretching for some five hundred yards across the lake. Due to dense weed growth, the fish are mostly caught by baited hooks attached at intervals by short leaders to a long line, which floats on the surface of the water weed and often stretches for 300 or 400 yards in a wide loop. Live fish of fingerling size are used to bait these hooks and the Mohannas keep numerous captive herons and cormorants for securing the fish used as bait. These captive birds are tethered by one leg to the small punts and taken to the shallows when required for fishing. One small punt which I photographed had a Large Egret (*Egretta alba*), a Purple Heron (*Ardea purpurea*) and a Grey Heron (*Ardea cinerea*) tethered to its gunwales, whilst another house boat had at least fifteen egrets and herons of various species plus five Little Cormorants (*P. niger*). The Large Egret seemed the most popular captive species possibly because of its size; it is distinctly bigger when seen alongside the Grey Heron. Surprisingly the Large Egret was also the most numerous and conspicuous of the many wild egrets and herons seen around the lake. In the early 1900's Ticehurst mentions having seen but few anywhere in Sind and even Sálím Ali only saw two pairs on Manchar. In contrast to the drastic decline in occurrence of nearly every other conspicuous species of water fowl, why should these have increased? The Little Cormorant was also a favourite captive but not the Paddy Bird or Cattle Egret, possibly because of their predilection for frogs instead of fish. I was surprised to see several captive Reef Herons (*Egretta gularis*). There was no trace of this species amongst the wild ardeidae and indeed I had never heard reports hitherto of its being observed more than 30 or 40 miles inland from the coast and that only during the monsoon season. On enquiries I found that large numbers come to Manchar during the summer particularly the early part, and I surmise that they follow the *Pala*, a species of Sea-herring which migrates to spawn in Manchar in huge numbers in March and April. Manchar must be quite 160 miles inland from the coast so this is an interesting record of its penetration. Though a fairly small bird the Reef Heron, was evidently preferred by the Mohannas over the larger Purple and Grey Herons. And here, I am tempted to

¹ These are the vernacular names.

digress momentarily to record that a closely allied species (*E. sacra*) spreads right across the south-west Pacific and I saw many specimens fishing off the Coral Reefs of the Solomon Islands last September and learned that it occurs there in both white and the usual slaty blue forms. Around Karachi *E. gularis*, occurs in a pale grey and very dark slate blue phase, as well as pure white specimens. This species presents a wonderful example of polymorphism which deserves further study.

Earlier writers have remarked on the callous cruelty with which the Mohannas keep wounded ducks as well as fish alive after capture, and there was further evidence of this in the method by which these captive herons and cormorants are prevented from fishing and so kept hungry until required to perform for their masters. The Little Cormorants I noticed had the gular pouch of their lower mandibles punctured and pulled up over the upper mandible so that the unfortunate birds are unable to open their mouths at all until the lower mandible is released. Similarly I saw Large White Egrets with their lower eyelids sewn by cotton thread and pulled over the eyes, the thread being drawn in a loop across the top of their crowns. Presumably the thread is cut and the eyelids released in the same way, when the birds are required for fishing.

By the end of the day I estimated, that unless vast numbers of ducks were hiding in the reed beds, not more than five or six thousand ducks of all species were around the lake. About a third of these were Mallard (*Anas platyrhynchos*) and teal which stuck to the reed beds and the eastern shore whilst the remaining two-thirds were White-eyed Pochards (*Aythya nyroca*) in separate flocks and again separate flocks of Common Pochard (*A. ferina*) mixed with about 15 to 20% Tufted Pochard (*A. fuligula*). Mallard and White-eyed Pochard were undoubtedly the two dominant species and I did not identify any Pintail (*Anas acuta*) or see a single Redcrested Pochard (*Netta rufina*), two species which I had been told were generally quite numerous on Manchar. On the western banks in the reedy shallows I also put up a number of small groups of Shovellers (*A. clypeata*) and there might have been three or four hundred of this species. But nowhere were there any solid black flock of water birds such as were encountered by Sálím Ali, and in fact there are many smaller jheels in Sind which harbour ducks in several hundred thousands as my hunter friends later testified. It is noteworthy that 1965-66 has been one of the worst drought years in the past forty years in the Indus water-shed. Few inundation jheels or suitable feeding places being available, ducks had concentrated in unbelievable swarms on the few large and permanent bodies of water. The small numbers on Manchar are therefore all the more remarkable. But it is the virtual disappearance of the coot which saddened me. In 1914 Ticehurst described the phenomenal numbers of coots which swam on Sind lakes, and stated that

flocks could be measured not in acres but in square miles. Whole villages lived on the trapping and sale of these unfortunate birds for meat and at the same time they attracted a great concourse of raptors. Even in 1928 Sálím Ali averred that the taking of 1000 to 2000 daily seemed to make no impression whatsoever on their numbers. Apart from observing three or four small flocks of a dozen up to one hundred individuals, I saw but one large flock on the whole lake, and this far from covering acres was a mere black ribbon numbering perhaps 3000 birds. In this Continent the lowly coot has probably escaped large scale ringing operations, and I am not aware of their main breeding grounds. All West Pakistan birds are winter visitors though a few stragglers have been observed to summer in the foothill regions. I suspect that a good number breed in the swamps of Seistan as Punjab does not receive such numbers as Sind has always done. Seistan is being rapidly dried up by new irrigation and hydro-electric schemes and from what little I have read about Russian developments, there have similarly been many new Dams and Hydroelectric schemes in Asiatic Russia. Perhaps the resultant ecological changes have done more to reduce the coot population than even the ruthless hunting of the Sindhis.

Having a well illustrated bird book with me, I could show various pictures to the boatmen who evinced a keen interest in the pictures, and I was able to cross examine them about the occurrence of many bird species known to frequent the lake and add this to my own observations. I saw no Painted Storks though they were seen in August of this year in small numbers on Manchar by a bird watching friend. I saw no Black Ibis (apparently common in 1928) or storks of any species. Pelicans still visit Manchar but according to my boatmen only in very small numbers. I saw none. Common and Demoiselle Cranes and even Spoonbills are very seldom seen. On the western bank I did see three or four small groups of Glossy Ibis (*Plegadis falcinellus*) feeding amongst the sedges and the largest flock numbered thirty-five birds. On the main body of the lake itself the two most conspicuous birds were Pheasant-tailed Jacanas and Whiskered Terns (*Chlidonias hybrida*). The latter were fishing everywhere and must have numbered three or four hundred individuals. Perhaps the thick weed makes conditions unsuitable for diving species of terns. Certainly I saw no Caspian Tern (the dominant species in 1928) and only 2 or 3 pairs of noisy River Terns (*Sterna aurantia*) and three or four Blackbellied Terns (*Sterna acuticauda*). The Whiskered terns probably feed on small molluscs, flies etc., as they capture their prey by suddenly dipping down to the water surface without actually plunging in. There were three or four small flocks of gulls which were predominantly Blackheaded Gulls (*Larus ridibundus*) with here and there a Brownheaded Gull (*L. brunnicephalus*) easily recognised by its wing

tips. I saw only very few Slenderbilled Gulls (*L. genei*) which are usually the dominant species on the lakes of northern Sind.

Compared to the hundreds of thousands of Little Cormorants I have seen on other Sind lakes, there were comparatively few on Manchar. The weed-clogged water undoubtedly offers fish too easy an escape from the diving cormorants and moreover I have noticed that these birds seem to require prolonged periods of perching, to digest their food and dry out their plumage. The bare expanse of Manchar offers practically no suitable perch for webbed footed birds whereas many other Sind jheels are characterised by acres of flooded tamarisk bushes which are used by the Small Cormorants. I saw only one Darter (*Anhinga rufa*) and two Common Cormorants (*Phalacrocorax carbo*). Though I already knew from previous enquiries that flocks of geese no longer visited Manchar, this was corroborated by my boatmen who told me that for the past seven years they have deserted the lake entirely. What a sad contrast to the position as described in Sálím Ali's account.

But despite these disappointments my explorations afforded me many wonderful sights and two especial thrills. The first of these was a Little Bittern (*Ixobrychus minutus*). The Chestnut Bittern (*I. cinnamomeus*) is possibly the commonest species in Sind followed by the Yellow Bittern (*I. sinensis*) and then the Black Bittern (*D. flavicollis*) whilst the Little Bittern is by far the rarest. It is still fairly common as a breeding bird on the lakes around Srinagar as a friend of mine testified this summer, but in other parts of its range because of its extremely shy and skulking habits it is seldom if ever seen, though it is undoubtedly resident and breeding in Sind. We saw this delightfully trim little bird in a fairly small and open clump of sedges and rather than take to flight it froze in its characteristic upstretched stance, allowing me to guide the boat right around it and to study it from a few feet away. Its clumsy looking large olive green feet belied the agile manner in which it was able to clamber over and cling to the vertical reed stems. When put to flight it showed dull purplish black primaries and tail and being a female it had the forecrown also tinged with blue black. Either side of its neck and breast were heavily streaked with rich maroon while its mantle and scapulars were also streaked with a more brownish chestnut. The rest of its body plumage was a buffy yellow.

The only common bird of prey was the Marsh Harrier (*Circus aeruginosus*) and there were considerable numbers of these circling low over the vast reed beds watching for an unwary Purple Moorhen. I saw but a single Osprey (*Pandion haliaetus*) and on the western shore a large dark eagle. Though it lacked any light spots on secondary wing coverts or white on the rump when put to flight, it was I think a Spotted Eagle (*Aquila clanga*). It was very dark which in my limited experience of this species

is often the case though I have seen a captive specimen with pale golden crown and nape. A large dark eagle with comparatively long narrow wings flew low over the top of a reed bed with the obvious intention of surprising some Dabchicks (*Podiceps ruficollis*) feeding on the open water in its lea. It made two bold stoops but failed to capture anything. From its large size and comparatively long tail, and active manner I was sure it was an immature Bonelli's Hawk-Eagle (*Nisäetus fasciatus*) though its breast was quite brown, thus making positive identification impossible.

The second thrill I had was, the sighting of a magnificent adult, Imperial Eagle, which I believe to be of the European race (*Aquila heliaca adalberti*). The Imperial Eagle seemed to come from nowhere and it swooped down on the main flock of coots. This caused so much panic that several birds rose into the air whereupon one was easily snatched from above by the eagle's powerful talons. This action was witnessed by all the fishermen in the vicinity who immediately set up a great din, banging their poles upon the water and shouting to frighten the eagle and make it drop its prey. This it did, perhaps by accident, as it swung in a wide arc and again picked the floating bird off the water and made for the nearest shore. As it did so, it was turning its head from side to side as though looking out for any further attacker. One wing of the unfortunate coot was caught in the eagle's retrices yet it did not in any way affect its powerful and direct flight. But no sooner had it come over the land when a Greater Spotted Eagle with white rump clearly visible also appeared from nowhere and swooped upon it. The Imperial Eagle dropped its quarry as it banked upwards to meet this new threat. Both eagles then alighted on the grass close by, where they seemed to crouch glowering at each other. The drama was however not yet ended, for a young boy from the nearest boat waded ashore and ran to where the coot had fallen. As the startled eagles flew away, I saw the boy triumphantly pick up the coot which from its flapping wings was still very much alive.

Having seen a Pallas's Fishing Eagle (*Haliaeetus leucoryphus*) in the distance some moments before, I at first assumed that the bird attacking the coots was the same species. Indeed I was able to see clearly that its entire crown and nape were a pale grey. But since Pallas's Eagles tend to have dirty buff white heads and necks this grey colour even then surprised me. Moreover the nape of Imperial Eagles which I have previously encountered were always a golden tawny colour but in all lights and angles this bird seemed to have a grey almost white nape and the most striking feature was the bright white shoulders and leading edge to the wings (lesser secondary wing coverts). When it exposed its full back view it showed no white scapulars of the typical eastern race of *A. heliaca*, but the white shoulder patches and forward edges of the wings were extremely conspicuous. Its tail appeared a pale grey buff again making me think it

must be *Haliaeetus*, but it lacked any sharply contrasting terminal bar which I had clearly seen half a mile away on the other individual. Its overall plumage was a very deep almost purplish brown and when it rose to meet the Greater Spotted Eagle it was clearly a much larger, and heavier bodied eagle with broader wings. I also recall noticing its deep compressed bill with yellow cere and brown not white throat. Many years of bird watching have I hope taught me at least some humility in making identifications—particularly amongst the raptors and I have only decided after sifting my 'on-the-spot' written notes, that this eagle could not have been *Haliaeetus leucogaster* (it was too large and had a dark brown breast) or *Ichthyophaga ichthyaetus* (its tail was plain dirty buff all over without the central feathers being darker). *Haliaeetus albicilla* (which is not even included in Ripley's SYNOPSIS) has a wedge shaped tail and in any case lacks a whitish nape and *H. leucoryphus* has a bluish not yellow cere and white not brown throat. Last summer I was lucky to see a fine adult Imperial Eagle in a small zoo in North Wales which was undoubtedly *A. h. heliaca* the Asiatic race as it had conspicuous white scapular feathers, but its tail was quite dark grey barred with one or two broad grey brown bands and its wing shoulders were not noticeably light in colour. These are the sort of fascinating puzzles which make the sport of bird watching a perpetual challenge.

Even if my eagle did not conform to the books, it did provide in episodic form perhaps an explanation for the great decline in birdlife on Manchar Lake, for in the unequal struggle with mankind it is the birds that lose.